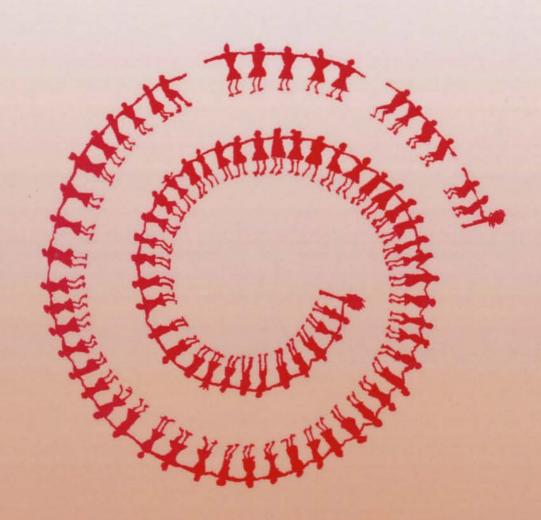
62149

South Asia Human Development Sector

Institutional Assessment of Sindh Technical Education and Vocational Training Authority

October 2010





South Asia Human Development Sector

Institutional Assessment of Sindh Technical Education and Vocational Training Authority

October 2010

Discussion Paper Series

Discussion Papers are published to communicate the results of the World Bank's work to the development community with the least possible delay. The typescript manuscript of this paper therefore has not been prepared in accordance with the procedures appropriate to formally edited texts. Some sources cited in the paper may be informal documents that are not readily available.

The findings, interpretations, and conclusions expressed herein do not necessarily reflect the views of the International Bank for Reconstruction and Development / The World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

TABLE OF CONTENTS

Acknowledgements Abstract Abbreviations and Acronyms

1. INTRODUCTION	6
1.1 Context	6
1.2 Scope of STEVTA Institutional Capacity Assessment	7
1.3 Goals and Objectives	8
1.4 Methodology and information sources	8
2. Assessment of Administrative and Management Capacity	10
2.1 Review of Laws and Regulation	10
2.2 Management Structure	15
2.3 Strategic Planning	17
2.4 Departments, Institutes and Infrastructure	18
2.5 Organizational Capacity	21
2.5.1 Human Resources	21
2.5.2 HR situation at the institutes	23
2.5.3 Rules of Business	25
2.5.4 Information Collection and Analysis	26
3. Networking and Coordination with Other Agencies	27
3.1 Building a strong partnership with the Private sector	27
3.2 Building Partnership with Other TVET Agencies	28
4. Budgeting and Finance	29
4.1 System of TVET Accounts	31
4.2 Fund Flow and Disbursement	31
4.3 Fee Structure at Institutes	32

5. Conclusions and Recommendations	33
Annexes	37
Annex-I: Composition of the Board of Directors at the time of establishment	37
Annex-II: Public Private Partnerships	37
References	39
List of Tables	
Table 1: Comparative features of Institutional Assessment Framework	8
Table 2: The Composition of the STEVTA Board	12
Table 3: Institutes transferred to STEVTA	
Table 4: TVET Programs offered by STEVTA	19
Table 5: Admission Policy Quotas	20
Table 6: Sindh TVET Profile (2007-08)	20
Table 7: STEVTA Human Resource Status	22
Table 8: STEVTA HR Situation in All Public Sector Affiliate Institutions	23
Table 9: Qualification of Teaching Staff in TVET Institutions in Pakistan	24
Table 10: STEVTA Budget Allocations for 2009-10	30
List of Figures	
Figure 1: Elements of STEVTA Assessment.	9
Figure 2: Organogram STEVTA Head Office	
Figure 3: Organogram STEVTA Regional Offices	17
Figure 4: 2009-10 Allocations STEVTA budget	30
Figure 5: Percentage Allocation of Funds in Sindh (2008-09)	31
Figure 6: Fee Structure in programs at STEVTA Technical Training Institutes	32

ACKNOWLEDGEMENTS

This work benefited from the kind financial support from AUSAID for the Pakistan Education Sector Review.

We are grateful for the assistance received from Abdul Wahid Uqaily, the Managing Director of STEVTA and the Directors of STEVTA departments: Khalil Ahmed Memom, Syed Nazar Ali, Dr. Masroor Ahmed Shaikh, and Mohammad Yousif Baloch.

Valuable comments on earlier drafts that improved the paper were received from the staff of the Sindh Technical Education and Vocational Training Authority, David Fretwell, Huma Waheed, Sabah Rashid, Uzma Sadaf and peer reviewers Zubair Khurshid Bhatti and Shashi Shrivastava.

For comments please contact vasin.janjua@gmail.com and ablom@worldbank.org.

ABSTRACT

Providing quality training that leads young people to jobs is critical for the economic and social development of the Province of Sindh, Pakistan. This working paper assesses the strengths and weaknesses of the Sindh Technical Education and Vocational Training Authority (STEVTA) as a provincial apex body in Technical Education and Vocational Training (TVET). The recent establishment of STEVTA was a major step to reduce fragmentation of training policies and programs. The paper assesses the Authority's legal foundation, governance, management, organization, human resources, financial resources and management, and networking with external organizations. The Institutional Assessment finds that Government of Sindh and STEVTA need to: (i) strengthen its Governance by establishing a clearer reporting structure for the management of the Authority's director, and by increasing the involvement of the private sector in the Board, (ii) enhance its institutional capacity through hiring of teachers in its institutions based upon increased funding and a sustainable HR rationalization plan for the system that is coordinated with planned physical investments in institutions, and (iii) build strong operational capacity by establishing rules of business and management information systems, and drafting a strategic plan. Lastly, to fully achieve its mandate, continued and consistent governmental support is essential to give STEVTA stability and funding to fulfill its mandate: Employment through Skills.

ABBREVIATIONS AND ACRONYMS

BBSYDP Benazir Bhutto Shaheed Youth Development Program

GoS Government of Sindh
IAG Industry Advisory Groups

ICT Information and Communication Technologies

ILO International Labour Organization

NAVTEC National Vocational and Technical Education Commission NISTE National Institute of Science and Technical Education

NSS National Skills Strategy
NTB National Training Board
OJT On the Job Training

PMSI Prime Minister Skills Development Initiative

PPP Public Private Partnerships
RPL Recognition of Prior Learning

SBTE Sindh Board of Technical Education

STTB Sindh Trade Testing Board

STEVTA Sindh Technical Education and Vocational Training Authority

TEVTA Technical Education and Vocational Training Authority

TVET Technical and Vocational Education and Training

1. INTRODUCTION

This working paper assesses the strengths and weaknesses of the Sindh Technical Education and Vocational Training Authority (STEVTA) as an apex body in Technical Education and Vocational Training (TVET) system of the Sindh province to implement skill development programs in the province. Specifically, it focuses on the STEVTA's capacity and resources, status of its consolidation efforts after its formation, and the role STEVTA is playing vis-à-vis its Mandate. The assessment leads to a set of suggestions to STEVTA and Government of Sindh on actions to build further capacity and strengthen STEVTA's operations to oversee and deliver demand-driven training and education in Sindh.

1.1 CONTEXT

In Sindh, the first ever polytechnic institute (now known as Government College of Technology, Karachi) was established in 1955. Over the years, a network of 450+ public and private training institutions have been established in all major cities as well as rural areas of interior Sindh. The technical education was administered by the Department of Education of the Government of Sindh (GoS) and the vocational training was mainly offered by the institutions controlled by the Department of Labor and Manpower, and the Department of Social Welfare. The exams and curriculum taught in technical institutes have been approved by the Sindh Board of Technical Education (SBTE); while the curriculum of vocational institutes is prepared and approved by the Sindh Trade Testing Board (STTB) of the Labor and Manpower Department (LMD). Prior to the establishment of STEVTA, the TVET sector in the Sindh province was fragmented and lacked coordination between agencies. To foster coherence in the system and economies of scale, STEVTA was established in 2007 by merging the management of the public institutions providing TVET in the province.

The TVET program inherited by STEVTA is less flexible in nature and rather based on 'one size fits all' approach. All over the world, the need for flexible and customized training has been realized and training programs have been reformed to meet the challenges faced by growing economies. The system has to be modernized along with the changing pedagogic technologies so that it can address the needs of different clients in physical and virtual classrooms as well as workplaces. Major challenges to modernize the TVET system in the province are:

- Training of its youth in employable skills;
- Expand access to skill development opportunities;
- Infrastructure improvements to create conducive learning environment;
- Approval of standards and subsequent up-gradation of curriculum for its programs;
- Transparency in Admissions Process;

- Development of Industry institute linkages;
- De-politicization of major Institutions;
- Recruitment of new teaching faculty who brings practical experience from industry;
- Training of in-service and pre-service teachers for technical teaching stream, and
- Better policy coordination among regulatory and financing agencies.

To expand access to skills development opportunities, the government of Sindh has devised and started implementing a major youth training program called Benazir Bhutto Shaheed Youth Development Program – BBSYDP. The BBSYDP assumes a major role in the skills acquisition strategy of the government which has provided full financing for the year 2008-09. It is aimed at providing employment oriented skills training to 100,000 people in Sindh. The total budget of the program is roughly 60 to 70 million USD. The program is being implemented through STEVTA Technical Institutions, training facilities in over 10 governmental Departments as well as the private sector. The training courses offered under the program are of short duration; between 3 months and a year.

Since its establishment, STEVTA is playing a pivotal role in bringing all the stakeholders together to reorient, reform, and deliver, the technical education in Sindh. The World Bank has been working closely with STEVTA since 2009 to assess its operations and capacity.

The discussion is organized in five sections: Section one provides the introduction, context, objectives, and methodology of the assessment; Section two assesses the administrative and management functions including the relevant legislations, organizational structure, capacity, infrastructure and STEVTA programs; Section three covers the networking and coordination mechanisms; Section four reviews budgeting and finance; while Section five concludes and provides recommendations for institutional strengthening.

1.2 SCOPE OF STEVTA INSTITUTIONAL CAPACITY ASSESSMENT

The Scope of the institutional assessment is the organization of STEVTA, including its mission, operations, departments and staff. The study focuses on the STEVTA organization and only touches upon one aspect of the training institutions under STEVTA's administrative control; namely their human resource capacity. The assessment does not analyze the outcomes, policies, functioning and needs of the wider TVET system in Sindh.

1.3 GOALS AND OBJECTIVES

The primary objective of the capacity assessment is:

- To assess the capacity of the STEVTA to plan, implement, and manage technical education and training, and related activities in its institutes;
- To identify the desired functions to carry out the mandate assigned by the Government of Sindh and TVET reform framework proposed in the National Skills Strategy (NSS) of Pakistan;
- To understand challenges faced by STEVTA regarding human and physical resources which may constrain its performance;
- To assess the networking mechanism necessary for coordination with national and regional stakeholders, including the private sector;
- To suggest measures to strengthen institutional capacity to improve performance.

1.4 METHODOLOGY AND INFORMATION SOURCES

There are several institutional assessment methodologies in use by different organizations; each one formulated to achieve a different objective. Morgan and Taschereau, 1996 and VanSant, 2009 summarize different methodologies and their features to facilitate practitioners in choosing among the alternatives. Our approach here is mainly influenced by the World Bank guidelines for institutional assessments (World Bank, 1995); however, we also take into account other aspects of assessments as synthesized in VanSant 2009 (see his comparative matrix given below in Table 1). The international standard ISO 10015 quality management guidelines for training framework are also considered for the purpose but not fully utilized for our analysis primarily because STEVTA is in formative phase and needs more time for ISO compliance.

Table 1: Comparative features of Institutional Assessment Framework

Institutional Resources	Institutional Performance	Institutional Sustainability
Legal structure and governance	Program results	Organizational autonomy
Human resources	Networking and external relations	Leadership
Management systems and practices	Application of technical knowledge	Organizational learning
Financial resources	Constituency empowerment	

Source: VanSant, 2009

Figure one below gives a diagrammatic overview of the elements assessed in this paper and its sections.

Laws and Regulation **Financial** planning and Resources Leadership Networking Management with other and Organization **TVET** agencies al Structure **STEVTA STEVTA** Networking Institutions with the and their Private sector infrastructure Information collection Resources and analysis Rules of **Business**

Figure 1: Elements of STEVTA Assessment

Source: Yasin Janjua and Andreas Blom

The STEVTA assessment draws upon the following sources of information: (i) critical review of past STEVTA ordinances and the 2010 STEVTA; (ii) Administrative data kindly provided by STEVTA; (iii) visits to STEVTA offices, and training institutions, and (iv) interviews and discussions with STEVTA officials and key stakeholders including government officials, employers, Karachi Chamber of Commerce and Industry (KCCI), private sector training providers, trainees, STEVTA board members, and National Vocational and Technical Education Commission (NAVTEC). Further, it is supplemented by information obtained from GoS, STEVTA, and BBSYDP websites. Access to limited information has been one of the important constraints. STEVTA extended its earnest cooperation for the completion of this study and provided as much information as possible in response to our requests. However, STEVTA being a relatively new organization; some of the institutional aspects were either incomplete or not readily available as they are in the process of establishment and consolidation of the information systems for Technical and Vocational Education and Training in the province.

While every effort is made by the author by sorting out relevant laws and notifications and subsequently researching their implications by seeking clarifications from relevant individuals,

no claims are made in this regard as superior courts are deemed to be the only authority to interpret legal documents in case an ambiguity arises in interpretation.

2. ASSESSMENT OF ADMINISTRATIVE AND MANAGEMENT CAPACITY

STEVTA is constituted as an apex body to regulate, guide, monitor, and finance the TVET sector in the Sindh province.

2.1 REVIEW OF LAWS AND REGULATION

In order to understand the functioning of STEVTA a review of the ordinances and administrative notices is required. These provide the legal framework for its management, the decision making process, its mandate, the mission, and scope of activities.

Realizing the need for consolidating and reorienting the TVET system in the province, the government established STEVTA through an ordinance passed and issued by the Governor of Sindh in August 2007. The Ordinance was given a lease of life until July, 2009 through Presidential Order of Emergency dated 3rd November, 2007. The Ordinance lapsed after the Supreme Court order declaring Presidential Order illegal. The Provincial Legislature after discussion approved it to form an Act. The STEVTA Act was passed by the provincial assembly with few changes to previous Ordinance and subsequently signed by the Governor of Sindh into the Law. The promulgation of the Sindh Technical and Vocational Education (STEVTA) Act 2010 has provided adequate constitutional and legal cover to STEVTA, which has been constituted as a corporate entity.

The government has shown its support and confidence in STEVTA by transferring to it the administrative control of all public TVET institute and administrative offices soon after the functionalization of STEVTA in 2009.¹

It is worthwhile to note that some employees of these institutes and departments voiced concern regarding their placement under the autonomous body of STEVTA. In 2009, several constitutional petitions were filed against STEVTA. These petitions were not to threaten STEVTA's existence but to safeguard employment conditions of existing employees, to implement good governance, and ensure smooth transitions of employees to the new organizational setup under STEVTA. In order to allay the grievances of the employees of the institutions reflected in those petitions, the STEVTA Act 2010 has declared these employees to

_

¹ The Government of Sindh has transferred the administrative control of all Technical Education and Vocational Training Colleges, Institutes, Schools and Centers working under Education, Labor and Social Welfare Departments and the District Governments along with all assets (moveable, immoveable) including human resources and their administrative offices to STEVTA through a Notification No. SO(C-IV)SGA&CD/4-5/2007, issued on April 24th 2009. However, there are some TVET programs in the province which are being run under the Ministry of Science and Technology to achieve specific objectives (for instance, PASTIC which is providing trained manpower for Ministry's ongoing research programs).

continue as employees of the Government to be governed / administered by STEVTA. Subsequently, the powers were transferred to Chairman / Managing Director, STEVTA under direct supervision of the Chief Minister Secretariat. This move allowed the existing staff to continue working under the Sindh Civil Servant (Appointment, Promotion & Transfer) Rules, 1974. Importantly for the future, the Act does allow STEVTA to prepare its own service rules and competency criterion for its new personnel through Clause 14 of the Act.

STEVTA mission, vision and objectives can be understood from the functions and powers conferred in the Section 4 (clauses i through ix) of the Ordinance.

As an apex institution its mission is to promote employment through skills training. The Authority is mandated with a mission to lead the technical education and vocational training initiatives in the Sindh province by performing a multitude of functions which include formulation of policies and plans; mobilization of human, physical and financial resources; and strengthening institutional linkages including public-private partnerships (PPP) in collaboration with other stakeholders such as employers, NAVTEC, private training providers, civil society, and other public sector organizations.

The authority has set a vision to develop quality workforce in Sindh to meet the local and international labor market needs by achieving excellence in training through effective management and regulation of TVET in the province.

The following are according to STEVTA the major objectives for the establishment of STEVTA:

- to promote TVET opportunities for youth in line with the industry demand at local and international level;
- to provide policy direction and facilitate resource mobilization including financial and manpower for TVET promotion;
- to improve internal and external efficiency of TVET system in coordination with the NAVTEC;
- to undertake restructuring of the TVET institutions including their upgradation, reform, merger, and potential closure;
- to improve institute industry linkages and public private partnerships;
- to monitor TVET programs in terms of their effectiveness in filling skills gap;
- to promote and strengthen internships and traineeships for the students; and

11

² See Services, General Administration & Coordination Department's Notification No. SO(C-IV)SGA&CD/4-4/07 dated September 26, 2009.

• to facilitate the development of competency based standards, testing criteria, and modular curriculum in line with skills acquisition needs and requirements of the national and international job market.

STEVTA board, its composition and functions: The board is entrusted with all matters of policy and administration of the authority and its functions through Section 5 and 7 (clauses a through g). A significant change has been made for the constitution of the STEVTA Management Board from the original 2007 Ordinance to the newly passed 2009 Act (See Composition in Table 2). The re-constituted Board will consist of 16 members of which only 3 will be from the private sector. The remaining members will be taken from the provincial legislature and the departments of the government. Once appointed, the public sector representatives will remain on the board for a period of three years. The term of the private sector members is not defined; however, they are assumed to serve according to their convenience and can tender their resignation to the government at any time.

The Chairmanship of the Board is entrusted with the Minister, Sindh Technical Education and Vocational Training Authority. This is a substantial departure from existing norms in many developed countries where such authorities are successfully constituted as corporate entities with an apolitical chairman from the private sector. Experience from other countries suggests that there is a risk of politicizing the day-to-day operations of the Authority with the current governance structure.

Table 2: The Composition of the STEVTA Board

Curr	ent Composition as per STEVTA Act 2009
Public/Political Representatives (4)	Minister, STEVTA
	Vice Chairperson to be appointed by the Government
	Member of Provincial Assembly
	Member of Provincial Assembly
Public Sector (7)	Secretary of the Administrative Department
	Secretary Finance
	Secretary, Education & Literacy
	Secretary, Labor, Industries
	Secretary Social Welfare Department
	Secretary Information Technology Department
	Managing Director, STEVTA (Member Secretary to the Board)
Public Sector Autonomous Bodies (2)	Representative of the NAVTEC
	Representative from the Mehran University of Engineering and Technology
Private Sector (3)	Industrialist
	Industrialist
	A representative from the Agriculturists

Source: STEVTA

Decision making process in the Board: as per Section (6) of the Act rules of business, presence of five members may constitute a quorum for a meeting. The members would be notified well in advance (the time period is not mentioned in term of days) of the meeting in which important decisions have to be taken. The decisions are adopted with majority vote yet the Chairman has a casting vote in case of a tie to reach a decision. The decisions come into effect with the signature of the Managing Director (who acts as a secretary to the Board). Furthermore, the Board is empowered to setup technical committees for efficient performance of the Authority's functions.

The Board does not have the power to appoint the Managing Director, which creates an uncertain situation of who has the power of administration of STEVTA. The Managing Director is appointed by the Government as per Section 8 (1) of the Act. This seems contradictory with Section 5 (1) of the same Act that vests all matters of policy and administration with the Board. The power to select, appoint and if necessary dismiss, the Managing Director is one of the most important powers of the Board. Without this power, its ability to set policies and give directions for administration is significantly curtailed. Consequently, the act undermines the authority of Board. Further, this structure effectively gives the Managing Director two masters and an undefined line of command that could lead to unclear responsibilities. It is recommended that the Managing Director is hired by, and reports only to the Board. This gives clear responsibility and line of command, which is necessary to achieve the best results. The government would exercise its strategic influence through its representatives on the Board and/or through objective and clear funding arrangements.

Limited private sector involvement in the Board: The composition of the Board allows only 3/16 (19%) members. Also, the minimum quorum for a meeting does not necessarily have to include private sector representatives. All over the world, the success of TVET authorities is highly dependent on the composition of its boards – providing greater participation and say in policy making by the private sector. This directly improves the responsiveness of the Apex body to employers' needs.

The first best solution to rectify the limited private sector involvement in the governance of STEVTA is to increase the share of private sector representatives. Alternatives to counterbalance the over-weight of the public sector include: (i) substantial private sector involvement of the management of training institutions. STEVTA is in the process of preparing a policy regarding greater involvement of private sector in the management of its institutions and promoting public private partnerships, and (ii) Include private sector representatives in the Board's technical committees to allow policies to reflect industry experience and needs.

STEVTA act and the act of the SBTE have a few overlapping jurisdictions. The STEVTA has been assigned some functions which seem to be overlapping with the functions already assigned to the Sindh Board of Technical Education (SBTE). SBTE was created through the Sindh Ordinance No.XVI of 1970 and has been conferred with the powers to approve curriculum and decide about the courses of study for the exams administered under its supervision. The

SBTE amendment ordinance 2002 assigns the role of controlling authority to the Governor of Sindh; earlier Secretary of Education was assigned this function. The relevant clauses of the SBTE act are as follows:

- "...power to organize, regulate, develop and control technical, the board, vocational, industrial and commercial education in Sindh [clause 12(1)]."
- "make rules to provide for ... general scheme of studies including the total number of subjects to be taught and the duration of courses [clause 14(2)]."
- Quality Assurance powers: a) "to hold and conduct examinations pertaining to technical, vocational, industrial and commercial education below degree level and such other examinations as may be determined by Government; b) "to prescribe courses of study for its examinations; c) "to lay down conditions for recognition and affiliation of institutions"; d) "to accord refuse or withdraw recognition, wholly or partly, after considering inspection reports received from an inspection committee appointed by the board in this behalf"; e) "to inspect and arrange for inspection of recognized institutions and call for inspection reports;" f) "to lay down conditions for admission to its examinations...; g) "to grant certificates and diplomas ...; h) "to fix, demand and receive such fee as may be prescribed; i) "to supervise the residence, health and discipline of students of recognized institutions with a view to promoting their general welfare"; j) "to organize and promote extramural activities in and for recognized institution." [Section 12(clause 2)]

Seemingly, this is in conflict with clause 7(h), 7(i), and 7(j) of the STEVTA Ordinance which confers the following powers:

• "to regulate quality control for implementation of skill standards, syllabus, trade testing and certification of technical education and vocational training institutions."

However, in order to remove any ambiguities and conflicts of interest the STEVTA Act 2009 has two powerful clauses (Clause 19 and 24) –Clause 19 allows a override to anything contained in any other law in force at the time of enacting the Act while Clause 24 allows the Government to make rules to remove ambiguities and difficulties not consistencies with the provision of the Act and subsequently enforce such rules through promulgation of the Government orders.

If left unaddressed, the overlap in responsibilities between STEVTA and SBTE can lead to conflicting policies and duplication of quality assurance rules and programs with the TVET system. Currently, the two bodies undertake limited coordination, despite performing some overlapping duties, such as approving curricula and conducting assessments for similar programs, notably programs with high element of training and hands-on skills (as opposed to more academically-oriented technical education). Further, the qualifications issued by the Sindh Trade Testing Board (STTB) under STEVTA and the qualifications issued by the SBTE are not mutually mapped to each other, which lowers the incentives for trainees and workers to receive

training and acquire skills. Further, the lack of clarity and regulatory overlaps has in other countries led to a poor environment for collaboration.

The overlap can be addressed by an agreement between STEVTA and SBTE to clearly delineate their roles and responsibilities. Notably, SBTE can strengthen its main mandate as an independent quality assurance agency that maintains quality for the whole of TVET at both the individual and institutional level through institutional accreditation. An independent quality assurance agency will ensure that TVET providers meet common quality standards, which satisfies customer's needs at trainee as well as industry level. This is global best practice. A similar separation of responsibilities between STEVTA and SBTE would eliminate a potential conflict of interest within STEVTA of both being an administering and financing agency at the same time as a quality assurance agency through the STTB. In the presence of an independent and effective quality assurance agency (SBTE), STEVTA will be able to deliver quality-assured training services in an effective and credible manner. Hence, it is recommended that GoS develops an agreement between STEVTA and SBTE that clarifies the roles and responsibilities of the two agencies.

Consistency of the Act with the NAVTEC-led National Skills Strategy. Overall the mission, goals and objectives of STEVTA are clearly defined and are consistent with the National Skills Strategy (NSS) of Pakistan which may ensure synchronization of skill development activities and mobility of labor to other parts of the country. However, the Ordinance also provides a mandate to STEVTA to develop industry-led curriculum, standards, and testing. However, according to national ordinance, this also falls under NAVTEC's and, as mentioned above, under Sindh Board of Technical Education's domain. Given its benefits in terms of mobility, a national endorsement of skills standards is important.

2.2 MANAGEMENT STRUCTURE

The management of the Authority is entrusted with the Managing Director (MD) and has been providing the legal cover through Section 9 & 10 of the Act. The MD is supposed to directly report to the Board. However, as mentioned earlier, the Manager is appointed by the government. Hence, it is unclear whether the MD effectively reports to the Board or the Government. The MD is initially appointed for three years. She/he is deemed to be a competent professional with knowledge of administrative procedures, industry and labor market linkages as well as TVET. She/he is responsible for the day-to-day functioning of the Authority, including management of financial system, human resources, and academic affairs. The MD is recruited on market salary in principle determined by the Board; however, the post is considered equivalent to a pay scale

_

³ Clause 14 (i-v) confers power to SBTE to make rules regarding the recognition and withdrawal of institutions; general scheme of studies to be taught; and eligibility criteria for diplomas and certificates.

20 (BPS-20) officer of the government. The MD is responsible for preparing annual reports and appraising the government and the Board about STEVTA operations.

The STEVTA Board has approved the establishment of a full-fledged management tier under MD with eight departments (see the organogram at Head Office in Figure 2 and Regional Offices in Figure 3).

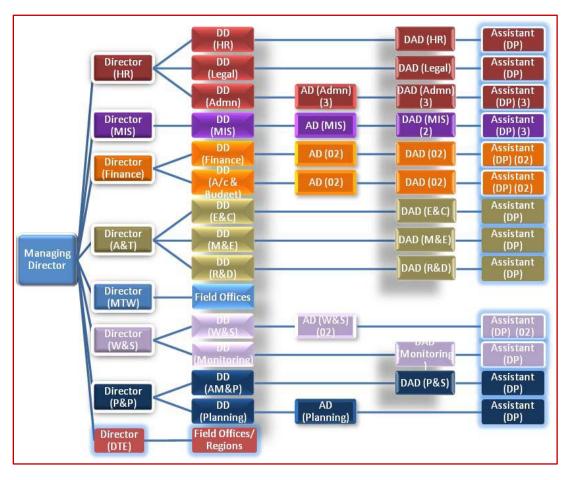


Figure 2: Organogram STEVTA Head Office

Source: STEVTA

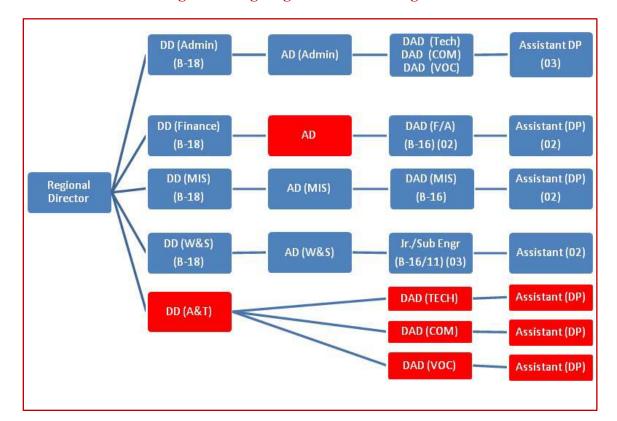


Figure 3: Organogram STEVTA Regional Offices

Source: STEVTA

2.3 STRATEGIC PLANNING

STEVTA is entrusted with restructuring of the TVET policy and infrastructure in the province through clauses 4 (i to x) and developing a strategic plan with milestones to guide the Authority in its continual improvements. Currently, the Authority is in operation on interim guidance of the Board with relatively appropriate level of strategic planning. It is the Board's responsibility to develop a strategic plan to guide it in all decisions. The Plan would seek to achieve STEVTA's mission of "Promoting Employment through Skills". Through the Planning process, the Board would engage with all STEVTA's stakeholders (Employers, Trainees, Instructors, principals, and government agencies) and formulate a medium term plan with specific goals and linked key performance indicators. A plan would provide stability in the operations of the Authority and allow for multi-annual planning. The plan should include an annual operational plan to be developed by the Managing Director each year and approved by the Board. It would be the MD's responsibility to implement such annual implementation plans. It would be the Board's task to yearly assess progress towards the announced goals and if necessary adjust implementation plans. Given the young age of the Authority and the many urgent challenges it faces, an efficient and rapid strategic planning could be undertaken in order not to direct focus away from the daily challenges of operating the Authority.

2.4 DEPARTMENTS, INSTITUTES AND INFRASTRUCTURE

The STEVTA Act 2009 transfers all moveable and immovable assets related to TVET infrastructure in Sindh to the Authority through Clauses 15(1) and 16 of the Act. With its Head Office located in Karachi, STEVTA exercises its powers through five Regional Offices at Karachi, Hyderabad, Mirpurkhas, Sukkur and Larkano. The Authority manages over 250 institutes, spread over 23 districts of the province, which provide technical, commercial, and vocational education and training. The following institutes have been transferred to STEVTA through a notification of the government.

Table 3: Institutes transferred to STEVTA

	Institutions Type	I	nstitutior	Teachers		
		Male	Female	Total	Male	Female
Department of Technical	Government Colleges of Technology	4	0	4	215	
Education	Government Monotechnics Institutes	44	1	45	93	12
	Government Polytechnics Institutes	15	7	22	189	20
	Govt Commercial Training Institutes	16	0	16	63	2
	Govt College of Education in Commercial Practices	25	0	25	91	
Directorate of Manpower	Government Vocational Institutes	1	15	16	50	58
and Training	Vocational Training Centres	4	0	4	25	
	Youth Vocational Centres	7	0	7	20	
	Apprentice Training Centres	3	0	3	74	
Department of Social	Socio-Economic Centres	0	16	16		
Welfare	Government Vocational Schools	3	53	56	06	112
	Technical Training Centres	17	6	23	159	19
Total		139	98	237	985	223

Source: STEVTA website

Prior to the establishment of STEVTA, the Department of Technical Education (DTE) was responsible for the all schools in technical education stream while Directorate of Manpower and Trainings and Social Welfare for Vocational training centers and institutes. A total of 237 Technical and Vocational institutions, of which 139 are for males and 98 for females, were managed by these departments (breakdown by previous administrative agency and gender is given in Table 3 above). Nevertheless, a provision of the STEVTA Act 2009 allows the government to remove any establishment or class of establishment or an institution from the jurisdiction of the Act either conditionally or unconditionally. For instance, recently one institution meant for special persons under the control of Department of Social Welfare has been transferred back to the department of Social Welfare. The remaining 96 institutions have been given under the administrative control of the Director of Technical Education and the Director of Manpower and Training within STEVTA.

The TVET program streams offered by STEVTA are given below in Table 4 along with duration and entry requirements.

Table 4: TVET Programs offered by STEVTA

Type of Institution	Program / Course Category	Duration	Entry Requirements
Government Colleges of Technology	Bachelor of Technology	4 yrs	DAE
Government Habib College of	Bachelor of Science in Industrial	4 yrs	DAE
Technology, Shaheed Benazirabad	Technology		
Government Colleges of	Diploma of Associate Engineering	3 yrs	Matric/ HSc
Technology/Polytechnics/	(DAE)		(Intermediate pre-
Monotechnic			engineering)
Technical Schools / Government	Technical School Certificate / Matric	1 year	Matric
Vocational Institutes	Technical		
Government Commercial Training	Diploma in Commerce (D.Com) /	1-2 year	Middle/Matric
Institutes(GCTI) / Government	Certificate in Commerce (C. Com)		
Colleges of Education in Commercial			
Practices			
Technical Training Centers (TTC) /	Diploma in Information Technology	3 months to	Middle to Matric
Vocational Training Centers (VTC) /	/ Certificate / Short Courses	a year	
Social Welfare Training Institutes /			
GCT/GPI/GMI			
Government Vocational Institutes /	Vocational Diploma / Certificate	3 months to	Middle to Matric
Schools		a year	

Source: STEVTA Admission prospectus

The most common courses offered in TVET institutions are: auto mechanic, diesel technology, electronics, foundry, industrial electronics, mechanical drafting, mechanical engineering, refrigeration and air-conditioning, machinist and welding, electrician, computer application, coal mining, petroleum, instrumentation, chemical, garment and textile technologies, etc.

The intake of students into TVET programs is based on a quota system and does not fully rely on admission tests. For seats reserved for certain special groups mentioned in admission policy the selection of candidates is required against a merit list among applicants allowed to apply for those particular slots⁴. For DAE, besides entry requirements mentioned in Table 4 above, there are other entry requirements as well. These requirements ensure access of students from different parts of Sindh including backward areas to get admission in 3 year DAE programs. In each case 10% candidates with qualification higher than Matric (also known as Secondary School Certificate, SSC, 10 years of schooling) may also be accepted. Candidates from Intermediate school (also known as Higher Secondary, HSc Pre-Engineering, 12 years of schooling) are also accepted. One of the new initiatives of STEVTA has been to contract out the admission tests to

⁴ 10% reserved seats are allocated among the following: (i) reciprocal transfers from other provinces as well as Children of Defence personnel including 1% for disabled candidates (5% total); (ii) Real Sons /Daughters/Sisters/Brothers of the staff of STEVTA (5%). In addition, 50 seats are available for candidates belonging to Balochistan (Makran Zone), 2 seats for candidates from Azad Kashmir, 2 for FATA, and 1 for Gilgit-Baltistan.

the national testing services. This is a strong step forward towards greater transparency and consistency in the admissions.

Table 5: Admission Policy Quotas

Category	Allocation of Seats under Admission Policy
Open Merit (District of Admission)	60% (10% for HSc pre engineering)
All Sindh Basis Including District of	f 30% (10% for HSc pre engineering)
Admission	
Reserved	10%

Source: STEVTA Admission prospectus

Data on enrolments in STEVTA institutions is not yet available with STEVTA. According to the Academy of Educational Planning and Management (APEM) database, in 2007-08, a total of 55,537 students were enrolled in 464 TVET institutions –this includes other public (run by federal authorities or autonomous public sector organizations other than STEVTA) and registered private sector institutions as well. (see Table 6).

Table 6: Sindh TVET Profile (2007-08)

Level	Enrolment and Gender Parity Index (GPI)				Teachers			Student Teacher Ratio	
	Male	Female	Total	GPI	Male	Female	Total	Male	Female
Monotechnic	12,273	916	13,189	0.07	569	35	604	21.6	26.2
Polytechnic	3,016	284	3,300	0.09	101	3	104	29.9	94.7
Vocational	20,373	18,675	39,048	0.92	1,247	740	1,987	16.3	25.2
Total	35,662	19,875	55,537	0.56	1,917	778	2,695	18.6	25.6

Source: Academy of Educational Planning and Management (AEPM), Pakistan Education Statistics 2007-08

The data reported in Table 6 indicates gender disparities in technical training institutions. However, a greater number of vocational institutions are available for females. Though student teacher ratio is appropriate for males, it is skewed in case of female institutes. There is an immediate need to fill vacancies in both male and female institutes.

The capacity utilization in individual institutes range from under 60% to 100% according to one study (See NPO 2005). There is however substantial uncertainty regarding the capacity utilization and it could be lower than the above estimate.

Industry-institute linkages currently do not exist in all institutions. However, there are some success stories, for instance, Honda Atlas Cars and Motorcycles of Pakistan has donated training equipment to technical training institutes in different parts of the country including Sindh province. The company is also known to provide internships to graduates of promising technical colleges of Karachi and sometimes (depending on business conditions) recruit their entire class of graduates. Most recently, Siemens Pakistan and Engro Chemicals have entered into a partnership with STEVTA to help remodel and manage at least one institute. However, these arrangements are few in numbers and need to be scaled up and replicated for creating sustainable and demand-driven TVET programs.

The recent STEVTA review of the infrastructure of TVET institutions (available on its website) reveals that more than 50% of the infrastructure and equipment is in dilapidated condition. While some of the institutions are non-functional, the remaining ones have surprisingly continued to function so far with less than 50% staffing. The review report finds that the institute buildings are very big but allocate less space for training. The institutes lack critical resources especially trained teaching faculty with industry experience. From anecdotal evidence, it seems that women institutes are on average functioning better than other institutions. This could present an opportunity for STEVTA to capitalize on gender mainstreaming in its institutions.

The rehabilitation of public institutes transferred to STEVTA is a gigantic task. It is critical that such rehabilitation program is linked to the hiring plan and based upon a long term sustainable financing plan, so that institutes which infrastructure are being updated also receive the necessary annual recurrent allocation to run programs. Again, such upgrades should take place in institutions located in local areas with long term demand for skilled graduates. It may be that it is necessary to merge institutions and reduce the number of sanctioned posts to ensure adequate future recurrent funding, and avoid operating inefficient institutions with a very low number of instructors and trainees in dilapidated buildings. STEVTA is in the process of designing and sourcing finance for such an upgrade program.

2.5 ORGANIZATIONAL CAPACITY

As discussed earlier the STEVTA has recently been assigned the management of the TVET institutions and their allied properties including human resource administration authority. It is in the process of consolidation and organizing properties and resources.

2.5.1 HUMAN RESOURCES

The control of employees of the institution has been handed over to STEVTA through Clause 15 (2-6). The Government however has made provision through Clause 5(5) to safeguard the employment conditions of employees by transferring them back to Government in case STEVTA cease to exist. STEVTA may recruit new staff based on rules and regulations and policies it may design according to its mandate.

Currently, the STEVTA is working with less than 50% of administrative staff not only in its Head Quarter but also in the Regional Offices as well (see Table 7 below). The Capacity in regional offices is less than adequate and may undermine STEVTA's ability to perform efficiently. The regional offices are running with 23% staff only. A dire need for new hiring against vacant positions is felt by the authority; therefore, it has undertaken an HR rationalization exercise to determine the HR requirements and justification of new appointments.

In order to analyze the HR strengthens and suggest a rationalization the following activities must be undertaken:

- a. Appraisal of the competence of its technical staff is required.
- b. Assessment of in-service incentives for improving competence for delivering training programs.
- c. The analysis of existing human resource rules and regulations.
- d. A realistic assessment of financing available in the medium term, including the possibility of filling the sanctioned strength.
- e. A review of the need for such a large sanctioned strength.
- f. An assessment of the balance between officers and support staff.

Table 7: STEVTA Human Resource Status and pay scale of leadership team

		Sanctioned Strength (SS)	Filled	Vacant	Capacity Constraint (% Filled)
STEVTA HR	Officers	34	20*	14	59%
Strength at HQ	Staff	72	21**	51	29%
	Total	106	41	65	39%
STEVTA HR	Officers	60	04	56	7%
Strength at Regional	Staff	205	58	147	28%
HQs	Total	265	62	203	23%
Grand Total		371	103	268	28%

Source: STEVTA * 1/20 female officer is working at HQ ** 08/21 female staff working at HQ

Senior Post	BPS grade
MD	20
Director	19
DD	18
AD	17
DAD	16
Asst DP	14

The STEVTA describes officers as Human Resource in the Basic Pay Scale (BPS) 17 and above (Research Officers, Assistant Director and above) while staff (the support staff) is considered BPS 16 and below which includes typist, stenographers, runners, finance clerks, etc.

Technical Human Resource Base of STEVTA: The resource base inherited by STEVTA from its predecessor institutions are characterized as one of civil service, while the new organization is being setup as a corporate authority. To provide a wide range of support services for its technical and vocational institutes, STEVTA must further build its capacity over the medium term in the following areas:

- skill development planning through market research studies;
- identification of skill gaps and reorienting the curriculum to bridge gaps in competencies;
- reforming and scaling-up apprenticeship, internships and on-job-training program;
- job placements of trainees; monitoring and evaluation of training programs;

- instituting in-service-training programs for trainers and teachers;
- pre-training; on training; and end of training support services such as competence gap analysis in collaboration with industry (private sector);
- evaluation of performance of training and institutions; and
- assessment of cost effectiveness and governance in training.

The recruitment of technical and professional experts in technical and vocational education who can address above mentioned critical issues will help the Authority to overcome obstacles in delivering quality TVET.

Ensuring equality of opportunity at all levels is imperative for the success of a modern TVET program. It should adopt gender friendly policies and provide opportunities for females in the organization. At present the STEVTA head office is staffed overwhelmingly by males which may result into limited interaction by women public institutes with the Authority.

2.5.2 HR SITUATION AT THE INSTITUTES

The HR situation at STEVTA institutes calls for immediate attention before the next academic year starts. There are almost 1,222 vacancies at STEVTA institutions. Majority of the vacant posts - 87% of total (1058/1222) are in the technical training institutes and only 13% (164/1222) in the vocational institutes (see Table 8 below).

Table 8: STEVTA HR Situation in All Public Sector Affiliate Institutions

Teaching Cadre	Previously under Directorate of Technical Education			Previously under Directorate of Manpower & Training Wing		Total	Vacancie	s	
	Female	Male	Total	Female	Male	Total	Female	Male	Total
BPS-16 & above	26	446	472	11	62	73	37	508	545
BPS-5 to 15	157	429	586	6	85	91	163	514	677
Total Vacant Posts	183	875	1,058	17	147	164	200	1,022	1,222

Source: STEVTA

The reasons which account for such a huge capacity gap are as follows:

- general ban in public sector on new recruitments due to budgetary constraints;
- lack of willingness among prospective employees to serve in interior Sindh and areas of hardship;
- lack of qualified individuals available for hiring;
- shift of HR resources between provincial and district government as the training institutes were developed during devolution by the previous government.

In order to overcome the shortage of human resources, STEVTA has temporary allowed Institute Management Committees (IMCs) to hire teachers at Rs. 5000 per month out of funds meant for student welfare at the centre to fill the critical teaching gap. The STEVTA has indicated that new recruitments will follow the HR rationalization exercise.

Majority of the posts (in grade 18 & above) will be filled through departmental promotions which means an equal number of posts will be created in the grades from which personnel will be promoted. Besides, teaching cadre vacancies, several essential posts in non-teaching cadre are also vacant; a breakdown of each cadre is not available at the time of writing this report. The department of finance has already allocated budget for all sanctioned posts which includes vacancies as well. This presents an opportunity for STEVTA to fill vacant posts on terms and conditions which can attract qualified professionals from industry to teach in technical and vocational institutes on either part time or permanent basis at competitive market salaries.

Qualifications of the teaching staff: The qualifications of teaching staff in technical institutes of Pakistan have been documented by Shah 2004 - see Table 9 below. Shah reports that the majority of the staff in Sindh TVET institutes is either DAE or B. Eng degree holders. Many of them may not have substantial industry experience. There are three technical teacher training institutes in the province. He found that they were not fully operational and contributing towards improvement in quality of teaching in Sindh TVET system.

Table 9: Qualification of Teaching Staff in TVET Institutions in Pakistan

Qualification	GCTs	GPIs	Monotechnics	Total	Percentage
PhD	1	-	=	1	0.2%
Master	3	39	9	51	10.5%
B. Eng	73	64	20	157	32.2%
B.A	1	-	=	1	0.20%
B. Tech (Hons)	69	13	9	91	18.6%
B. Tech (P)	-	11	2	13	2.70%
DAE	76	81	17	174	35.6%
Total	223	208	57	488	100%

Source: Shah 2004

No System of Rewards for Enhancing Teacher Qualification: In Pakistan, in general, the existing service rules for teaching and non teaching staff in the field of technical education do not provide any incentives for in-service training and promotions; and Sindh has no exception in this regard either. The focus group discussions at technical training institutes revealed that a few teachers undertook further study on their own personal initiative as they considered it necessary for professional development. It is recommended that STEVTA will work on reforms in this area as well and facilitate that teaching and non-teaching staff receive opportunities for professional development on a regular basis.

The HR Service Rules: are inherited from the organizations from which STEVTA has born through consolidation of infrastructure and resources. Being an autonomous organization the Authority is however given a free hand to frame its own rules subject to approval of the

Government. It is recommended that STEVTA adopts a corporate sector approach and HR management rules where relevant professional experience, performance and ability to initiate and manage change, counts more than political affiliations and simply being in service for years. Sound and effective new staffing, salary, and promotion policies are highly imperative. The HR department entrusted with the duty of framing new rules has recommended hiring a consultant for this purpose. Hiring staff at new rules and attrition is an important first step to overcome the gap in HR staffing.

The Authority and its institutions may need to be fully staffed, at least 90-95%, to provide effective service. The remaining 5-10% may account for transfers, retirements, job change etc. However, working with only 28% staff, as is currently the case, is likely to undermine the organization's efforts to bring about a significant structural change in the provincial TVET program.

Recruitment procedures against vacancies: The Authority is planning to advertise vacancies in a transparent manner. However, hiring relevant qualified teaching and non teaching staff against these vacancies in timely manner seems to be the biggest challenge as the Rules of Business for hiring people at market rates have not been prepared. As discussed earlier, the existing staff which has been inherited from several departments and their affiliated institutes will continue to work in their respective Institutes / Directorates under the supervision / control of Managing Director, STEVTA. As described above, STEVTA needs to draft and adopt its own service rules and ToR for each position. A slow process of attrition may not help in recruiting professional staff against existing vacancies.

Before, any additional hiring, STEVTA should conduct a resource and knowledge gap analysis of its existing HR pool so that the vacant positions are filled with technical and professional staff that has experience to deliver TVET based in a demand driven and market oriented manner. STEVTA has indicated that an HR rationalization exercise is underway and it will be completed by during 2010. Given the large pressure on public financing, it is likely that only a portion of the vacancies can be filled. The HR rationalization is critical in order to fill positions in institutions that will operate with sufficient instructors, trainees and acceptable infrastructure and learning resources. It will also help the Authority to develop an in-service training program with a focus to deliver TVET in demand oriented framework.

2.5.3 RULES OF BUSINESS

Developing rules of business is a major challenge for a nascent organization like STEVTA as it is in a transitional phase. For the time being it is observing Sindh Government rules until it frames and implements its own rules and regulations as per Section 22, 23, and 24 of the Act. It is recommended that STEVTA may adopt rules of business from other organizations (TEVTAs) and modify them accordingly. As mentioned above, the Authority has been following the Sindh Government Civil Services code as the rule of business for administration of its existing Human

Resources at the moment. However, it is looking forward to formulate its own rules as an autonomous organization.

Regarding rules of business for procurements, as an autonomous body of the Sindh government, it may benefit by seeking guidance from, and subscribing to the rules promulgated by the Sindh Public Procurement Regulatory Authority (SPPRA). ⁵ Similarly, the PPPs for provision of training is a new arena and some rule of business for a few promising PPPs have been framed, but an overall framework for PPPs has yet to be mainstreamed.

This is also true for rules of business for financial transactions (please refer to section four of this report for more discussion on this).

The Authority is also in the process of hiring four consultants for framing rules in the following areas: a) Public Private Partnership (PPP); b) Industrial Linkages; c) Benchmarking of the TVET Institutions; d) Framing of STEVTA Rules.

2.5.4 INFORMATION COLLECTION AND ANALYSIS

A well developed training Apex body or institution must be capable of defining training needs; designing and planning trainings; providing for the training; and evaluating the outcomes (see ISO guidelines 1999). The Authority currently relies on ad-hoc surveys to assess the size, status and activities in the TVET system in the province. No systematic Monitoring and Evaluation program is on the ground.

The Authority would gain considerably by developing a TVET MIS system, since it currently mostly relies on manual record keeping and ad hoc surveys. The shortcoming is understandable as the STEVTA has only recently taken control of its assets and moving fast towards developing its capabilities. A well developed MIS system serves as a backbone for managing the operations of a modern TVET system. An MIS team has been hired which is working on consolidating information about programs and stock of assets in a database.

Regular conduct of tracer studies. The tracer studies and performance evaluation of institutions was a task under SBTE as per SBTE Ordinance Sections 9, 11, 12, 13 and 14; however, only one study had been conducted in past. Recently, STEVTA is planning to conduct a tracer study of graduates from its inherited institutions for benchmarking purposes. STEVTA could institutionalize such tracer surveys.

Training Need Analysis (TNA) / **employer surveys**: The skills program run at TVET institutions in Sindh received limited direction from labor market research conducted by the government of Sindh. The Department of Labor in Sindh has been conducting establishment

⁵ See Sindh Public Procurement Act (SPPA) 2009.

surveys but they are of little use in directing skills development programs. Recently, the KCCI, BBSYDP and STEVTA undertook an employer study with the World Bank to feed into the Sindh Skills Development project.

There is also few (if any) institutional mechanisms in training institutes or STEVTA to undertake TNA which may inform the existing programs about skill and competency gaps an ongoing basis. A system of skill and competency gap analysis for feeding back into training program has to be in place to start the reform process. STEVTA could consider increased partnerships with employers and governmental agencies undertaking employer and/or labor surveys as a way to regularly obtain information about careers and trades in demand as well as growth sectors on the provincial economy.

Policy research and feedback mechanism: as the Authority matures, there is a need for policy oriented research to feedback to its leadership to assess impact and manage the quality of training.

3. NETWORKING AND COORDINATION WITH OTHER AGENCIES

3.1 BUILDING A STRONG PARTNERSHIP WITH THE PRIVATE SECTOR

The Public Private Partnerships (PPP) is considered as a vehicle of change for reorienting the TVET system in Sindh. Through PPP the Authority plans on involving the industry in decision making, management, operation, and setting the direction of the STEVTA skills strategy and training program. Under a major PPP initiative STEVTA has planned to handover management and control of selected technical institutions to the Not-for-Profit private sector organization. The Authority may continue to bear operational costs or capital costs for upgrading equipment and structural improvements. For the purpose 11 institutes have been selected in different districts (see Annex-II). While the rules of business for PPPs are being worked out, the Authority has identified some parameters for PPPs (See Annex II). However, the rules of business for PPP need to be strengthened. For example, the eligibility and performance criteria for PPP are not fully defined.

While developing PPPs, STEVTA should anticipate wrong incentives resulting from dual polices for public and private sector and must gradually harmonize its policies for both sectors. It should realize that the private sector (including the informal sector) is a driver of change and has been providing most of the jobs not only in the country but the province as well. It may look into providing incentives to institutions, both public and private, based on performance; for example, financial rewards for better delivery, skill development competitions, study tours, performance based promotions, retaining of higher proportion of tuition fees for public sector institutes, etc.

Partnership with civil society organizations is also an important pillar of PPPs. The STEVTA is planning to target marginalized and disadvantage school drop outs with less than secondary level of education. It requires understanding of broader social and cultural issues and requires a

structural change in its programs towards the role of women, school drop-outs, and disadvantaged people in society. It is also felt that the role of civil society organizations is not incorporated in its skilling program. NGOs are known to work effectively with people employed in informal sector through social-mobilizers.

3.2 BUILDING PARTNERSHIP WITH OTHER TVET AGENCIES

Coordinate with Sindh Board of Technical Education for mutual recognition of diplomas.

As discussed, the Sindh Trade Testing Board (STTB) under STEVTA certifies competences and award recognitions of competences/educational qualifications. So does the Sindh Board of Technical Education. Mostly, SBTE conduct assessments and awards qualification for longer term durations and for courses with more academic content, while the Trade testing board assess practical competences and mostly for shorter term durations. However, this division of labor is not formalized or systematic. There is no formal agreement or coordination between the two bodies on what kind of courses or competences that STTB assesses and which the Board of Technical Education assesses. This creates confusion among employers regarding the value of a diploma. In addition, there is no mutual recognition between the two bodies. This implies that skills and awards earned by learners/workers from the STTB is not recognized by SBTE. If a learner with a STTB certificate enters a course certified by SBTE; the previous certification is not recognized and the learner would have to start all over again. Therefore, the lack of mutual recognition lowers the value of a diploma. *An effective coordination between all the major TVET players in the province will not only benefit the trainees but employers as well - as both parties are the prospective customers of these apex organizations*.

Potential partnerships with commercial banks to provide Small Business Support Services including Microfinance. Linking graduates to job market or self employment through Business Development Services is a common practice all over the world. These are second tier services which are considered useful for helping trainees to start their own businesses. STEVTA is hoping to play a pivotal role in linking graduates to these programs by providing necessary information and let the trainees explore the option of self employment driven career paths. This will allow the Authority to focus on the first tier services which includes provision of training and identification of skill and competency gaps.

There are several gains from coordination with NAVTEC. Although, the 18th constitutional amendment may result in a substantial reduction in the role of federal bodies in education, including in TVET, and the fact that NAVTEC reportedly has not been actively seeking collaboration with the provincial authorities, there are several needs for national coordination and collaboration within TVET. These needs include: assessing skill gaps; developing nationally recognized standards and certifications; benchmarking across provinces, exchanging best practice, and developing common systems, for example common management information systems within TVET. A coordinated effort between apex training organizations will help to consolidate an already fragmented TVET system in Pakistan. For instance, the provincial

TEVTAs are looking forward to upgrade training syllabuses, standards, and certifications for technologies which are in greater demand. Collaboration within these areas would be efficient, instead of each TEVTA develops their own standards and certifications. Further, the federal government often through NAVTEC has invested in TVET, which the provinces have benefitted from. For example, the federal government through NAVTEC has initiated 14 technical training centers in uncovered districts of the Sindh province. Subsequently, these training institutes will be handed over to provincial TVET authorities.

Peer learning among the TEVTAs. Even though there are significant differences between the provinces, many of the challenges that the TEVTAs face are common. The TEVTAs would gain from increased exchange of policies, programs, and practices. An increase in the frequency of the meetings and possible establishment of a coordination mechanism for facilitating sharing of knowledge, best practices, and lessons learned would be to the benefit of all the TEVTAs.

4. BUDGETING AND FINANCE

As STEVTA has been setup as a corporate authority; therefore, it has been given complete autonomy regarding budgeting and financing of its skills development program. The Authority's budget appears as a four line item in the GoS budget documents. In 2009-10, when BBSYDP was under the umbrella of STEVTA, the BBSYDP budget appeared as a single line item in the overall budget for STEVTA (See Table 10). Nevertheless, detailed budgets for STEVTA and BBSYDP are prepared on New Accountant Method object and functional classification to support the single line budget. The BBSYDP program received a major share (59%) out of total allocation in FY 2009/10⁶.

The managing director of the Authority works as the principal budgeting, accounting, auditing, and procurement officer while the external audits are conducted by the Auditor General of Pakistan. Currently, STEVTA is facing some critical staffing and recruitment issues like any other newer organization. The Authority is in the process of hiring additional financial staff and building capacity.

Budget allocations from the Provincial government. The Act requires establishment of a Fund. All receipts of the authority from any source including annual grants from the government must be credited to the fund to build an endowment. Money will be drawn from the endowment as and when needed to run the day to day operations of STEVTA. The 2009-10 budget allocation grant from the Government of around Rs. 500 million has already been placed in the endowment. All tuition fee collected from the morning programs running under its technical and vocational institutions which was earlier deposited with the government will now be deposited in the STEVTA fund. In contrast, the money from self help basis programs will remain with the

_

⁶ The part of the STEVA budget to BBSYDP is not shown in the table and figure.

institution and as it is utilized towards salaries, materials, and repairs which cannot be fully met from the sanctioned annual budgets of the institution.

Provision of STEVTA Head Public Private _ Quarter Partnership for 18% **STEVTA** Institutes 12% District Social _ District Welfare **Technical** Institutions Education 6% Institutions 64%

Figure 4: 2009-10 Allocations STEVTA budget

Source: Computed by Authors from STEVTA budget

Table 10: STEVTA Budget Allocations for 2009-10

Spending Heads	Rs.	Percentage
STEVTA Head Quarter	3,703,704	18%
District Technical Education Institutions	13,558,115	64%
District Social Welfare Institutions	1,297,910	6%
Provision of Public Private Partnership for STEVTA Institutes	2,469,136	12%
Total	21,028,865	100%

Source: Based on STEVTA budget Allocations for 2009-10 – Budget for BBSYDP excluded

The share of the budget allocated to administrations is high, 18%, and efforts to direct more of the budget to training is recommended. Given STEVTA was established recently, there may be large start-up costs in terms of infrastructure, IT-systems etc. Further, a key gain from the creation of STEVTA is economies of scale in administration from three departments to one. One could therefore expect the share of STEVTA's budget devoted to administration would gradually decrease in the coming year. The strategic plan and the HR rationalization could consider including this ratio as a key indicator for the efficiency of STEVTA.

The percentage distribution for salary related expenditure is 88% of the total budget allocations while 12% is spent on non-salary component. The allocation is not very different from other TEVTAs in Pakistan. For instance, Punjab TEVTA spent 87.7% on salaries and 12.3% on non-salary component in 2007-08, Sadiq (2008). In comparison to other developing countries salary related expenditure is relatively higher, e.g., Peano et. al. (2008) have reported 46% of total

expenditure on personnel for long term training programs in Philippines. Institutions face shortage of funds for offering practicum for technical courses as the budget allocations do not cover the cost of required materials adequately (see Figure 5 below).

11.99%

88.01%

Salaries Recurrent Costs

Figure 5: Percentage Allocation of Funds in Sindh (2008-09)

Source: Sadiq (2008)

4.1 SYSTEM OF TVET ACCOUNTS

The STEVTA may look into strengthening its capacity in producing provincial TVET accounts in which information on funding sources and expenditures by programs and institutions is available for costing and planning purposes. This sort of information will not only be useful for budgeting and planning but also for determining unit costs as well as assessing the cost effectiveness of the programs. In the past this was not possible due to the fragmented nature of the programs.

4.2 FUND FLOW AND DISBURSEMENT

Currently, there is a dual mechanism for funding of STEVTA. The budget allocated by the Sindh government for functionalization of STEVTA is released to the Authority's assignment account in the National Bank of Pakistan in a fixed deposit. The interest earned for functionalization of STEVTA from this account is partly used to meet the operational expenses. The funds meant for its Directorates and public institutes are released through District Account Offices. The institutes under STEVTA though follow Sindh Government Financial Rules but they do not have a well developed financial management information system.

Budgeting and Finance system: The budgeting and finance system is being set up afresh for which new staff has been hired from the market for STEVTA HQ. It is hoped that the system will become fully operational during 2010. Nevertheless, the training institutes working under STEVTA need an overhaul regarding budgeting, costing, and financing of TVET programs. They do not have professional staff to undertake costing and budgeting exercises and planning of TVET programs. A reorientation of financial and budget allocation system is recommended to

keep up with the demands of a modern TVET system. For the same purpose, STEVTA has recently purchased an Oracle based Enterprise Resource Planning (ERP) Solution that will gradually be rolled out across the organization in 2010 and 2011.

4.3 FEE STRUCTURE AT INSTITUTES

While most of the funds come from the provincial government, there is also partial cost recovery in practice through student tuition fees, contributions from the Student Union Fund, admission card fee and exams fees. These fees are charged to students. The regular TVET programs offered in the morning only charges around a 7% of the cost of the trainings. Of that fee charged for morning programs 28% is remitted to STEVTA in terms of tuition fee; the remaining 72% is charged in lieu of facilities for the students (see Figure 6 below).

Moreover, the institutes have started self help basis program in evening. Students are offered admission on self finance basis. The evening programs fully recover the direct training cost of the program. The fee for these programs is therefore much higher than the morning programs which are subsidized by the taxpayers' money. The majority of the courses are demand-driven and instructors with industry experience are hired on contract. Some programs have been very successful and institutes are able to generate extra money for repair and maintenance and purchase of new equipment as well. All the fees for the evening courses are retained at the institutes and is utilized towards the delivery of the programs.

Total Fee in Pak Rs

Commerce

Tech Edu Evening Self Finance

0 5000 10000 15000 20000 25000 0% 20% 40% 60% 80% 100%

Total

Deposited with STEVTA

Fee retained

Figure 6: Fee Structure in programs at STEVTA Technical Training Institutes

Source: STEVTA Prospectus

5. CONCLUSIONS AND RECOMMENDATIONS

Providing quality training that leads to jobs is critical for the economic and social development of Sindh province. The setting up of STEVTA was a major positive step towards improvement of skills development in Sindh Province. The potential impact of STEVTA is tremendous as there was an urgent need to revamp skills development in the province. This is a gigantic task that will carry great returns in the form: (i) more training opportunities for young people; (ii) higher quality training that result in jobs; (iii) more relevant skills leading to increased productivity and competitiveness of key industries, such as textile, manufacturing, and construction. Continued and consistent governmental support is essential to give STEVTA stability and funding to fulfill its mandate: Employment Through Skills.

To achieve its mandate, this Institutional Assessment of STEVTA concludes and recommends that STEVTA strengthen its Governance, Institutional Capacity, Financing, and External Partnership.

- 1. STRENGTHENING GOVERNANCE. The Governance set-up of the Authority as an autonomous entity lends itself better to become an efficient, coherent, and professional management like many other developing countries. Nevertheless, there are three important shortcomings in the governance that require attention from Government of Sindh:
 - The new act has undermined the authority of the Board by the fact that the government hires the Managing Director. The act states that MD is hired by the government and his/her salary and perquisites are also decided by the Government. This undermines the power of the Board, and would complicate the governing of STEVTA since the MD would have to take directions from both the Board and the Government, which could be conflicting. It is recommended that the Managing Director is hired by, and reports only to the Board. This gives clear responsibility and line of command, which is necessary to achieve the best results. The government would exercise its strategic influence through its representatives on the Board and/or through objective and clear funding arrangements.
 - The composition of the Board is tilted towards the public sector. In other countries, such a tilt has resulted in lower labor market relevance of training and inefficient management of the training body. It is recommended that the number of representatives of employers and workers is increased in the Board. Further, compared to the situation in the developed countries, it is uncommon that a Minister is the Chairman of the Board of an Apex training body. This risks politicizing the day-to-day operations of the Authority. It is recommended that the Chairman is a non-political appointee, preferably from the private sector.
 - There are a few, but important, overlaps in jurisdiction between the STEVTA and the Sindh Board of Technical Education. Overlaps risk leading to institutional conflict

between the two bodies, which is unfortunate given the importance of collaboration between the two Boards. It is recommended that the two Boards mutually agree to their division of labor and a joint work agenda to create an integrated TVET system in Sindh for the benefit of trainees.

- 2. STRENGTHENING OF INSTITUTIONAL CAPACITY. Starting in 2009 STEVTA's management team has performed well despite serious resource constraints. Rapid strengthening of the Authority is a necessity to achieve success. This assessment recommends five overall actions to strengthen its institutional capacity:
 - The Board and the leadership of the Authority will need to develop a strategic plan. In the first year or two, a simple work plan may be the most efficient tool to guide staff and stakeholders of the key goals and programs of STEVTA. Overtime, it should gradually be developed into a full blown strategic plan. This strategic plan should have key indicators that the Board will track closely on a regular basis.
 - Integrate management and operations of the departments of STEVTA. The Authority is in a nascent stage operating with the organizational structure, systems, policies and practices inherited from the merger of the three departments (Department of Labor and Manpower, Department of Technical Education, and Department of Social Welfare). Over time, the vision of STEVTA would have to be realized by integrating the operation and practices of the various departments into an efficient and coherent organizational structure with one single system and one single set of policies.
 - Increase Human Resources in the TVET institutions and undertaking a HR rationalization plan. Currently, there are around 1,250 vacancies in the Institutions and 270 in STEVTA compared to the sanctioned strengthen.
 - Undertake a realistic HR plan that includes a rationalization of the positions in STEVTA and its institutions.
 - Frame new staff rules with incentives and accountability, including reasonable and fair performance assessments tools. Manage a fair transfer and administration of the existing employees.
 - Hire a sustainable number of new teachers based upon long-term availability of financing. The hiring of teachers/instructors should take place in institutions which have or will have adequate infrastructure, trainees and learning resources.
 - o Build expertise in analysis, policy making and administration within STEVTA in the prioritized core areas of TVET.
 - Collect and analyze information critical for administration and policymaking
 - Establishing a strong MIS to keep track of inputs (trainees, teachers, budget, etc),
 intermediate outputs (student progression) and outputs (graduates) is essential to

- monitor the performance of the system and the individual institutions, and to guide institutions and administrators to improve performance.
- o Undertake periodic tracer studies and impact assessments
- Conduct regular surveys of demand for skills in the Province with employers and disseminate the information to institutions, possibly through partnership with relevant government agencies.

• Strengthen capacity within Budgeting and Financing:

- Rapidly implement financial management software and build capacity in the institutions to manage budgets
- o Build the internal audit capacity
- Increase efficiency and allocate a smaller share of the budget to its own administration. STEVTA currently allocates 18% of the budget to administration.

STEVTA could as tangible goal of the institutional strengthening aim for international certification of its organization, for example ISO-9001 for quality management.

3. FORMING PARTNERSHIP WITH KEY STAKEHOLDERS will provide significant benefits to STEVTA in particular, the Authority can benefit from:

- A stronger Partnership with the private sector. This could be achieved by:
 - Increase number of representatives of employers at the Board (as recommended above)
 - Establish and empower Centre/Institution Management Committees with a significant share of private sector representatives
 - o Establish private sector advisory groups for each training program
- Continued deepening of the partnership with BBSYDP.
- Collaboration with Sindh Board of Technical Education. The SBTE plays an
 important role in Quality Assurance, including monitoring and assessment of TVET
 delivery and student and institute performance. Based upon international good practice,
 financing and provision should be separated from quality assurance. Therefore, SBTE
 should remain independent. However, there needs to be effective coordination between
 STEVTA (and its Sindh Trade Testing Board) and SBTE.
- National collaboration with NAVTEC or other TVET apex agencies. Fulfilling the STEVTA mandate with respect to development of competency-based training and certification would strongly benefit from collaboration with NAVTEC and/or other agency of body. Awarded degrees in Sindh and elsewhere in Pakistan should be recognized across the country.

- Collaboration with other TEVTAs. Exchange of best practice and other peer learning events among the TEVTAs. A functioning coordination mechanism between NAVTEC and other regional TEVTAs which will result in cooperation benefits and country wide TVET program coherence.
- Partnership with Development Partners (Donors) to increase financing for skills program and knowledge exchange.

Overall STEVTA must gain the confidence of trainees, teachers, employers and civil society by showing that its creation results in better skills and employment opportunities to youth. Doing so rapidly following, its creation will provide significant support from stakeholders in further improvements.

ANNEXES

ANNEX-I: COMPOSITION OF THE BOARD OF DIRECTORS AT THE TIME OF ESTABLISHMENT

Original Composition as per STEVTA Ordinance at the time of Establishment		
Chairman, STEVTA		
Private Sector		
Private Sector		
Private Sector		
Additional / Chief Secretary (Dev.)		
Secretary Finance (B&R)		
Secretary, Education & Literacy		
Secretary, Labor, Industries		
Managing Director, STEVTA		
Representative of NAVTEC		
NED University		

Source: STEVTA

ANNEX-II: PUBLIC PRIVATE PARTNERSHIPS

Parameters for executing PPP initiative are as follows:

- The private partners will have effective control over infrastructure and Human Resource of the TVET institutions;
- The PPP partner would be required to retain the existing employees for a minimum period of 6-12 months. During this period, the employees would be trained according to the training needs of the PPP partner. However, after the buffer period if the PPP partner is not satisfied with the performance of the employee, he will be transferred to any other TVET Institutions under the administrative control of STEVTA. There will be no layoffs.
- The Government would continue to bear the operational costs such as utility charges, repair & maintenance and salaries for the staff.
- The PPP partner would be required to extend training opportunities to the existing strength of the students in the institution selected under PPP at a highly subsidized rate (equal to the fee structure of the Government). However, the PPP partner may charge increased fees from the students admitted through additional training facilities created by them, to meet their enhanced operational costs.

• The STEVTA may incur capital expenditure for capital improvement and equipment upgradation depending on the level of expertise brought in by the PPP partner.

The terms of engagement may be negotiated between the parties for encouraging engagements under PPP mode. However, such agreement would require approval by the Board.

S. No.	Name of Institution	Proposed Units
1	Pakistani Swedish Institute of Technology, Quaidabad, Karachi.	Woodworking Production Unit Garments Production Unit
2	Govt. College of Technology, Khairpur.	Refrigeration & Air-conditioning Technology Workshop, Auto & Farm Workshop
3	Govt. College of Technology, Hyderabad.	Auto Workshop
4	Govt. Polytechnic Institute, Lyari, Karachi.	Auto Workshop, Refrigeration & Airconditioning Technology Workshop
5	Govt. Monotechnic Institute, Kohsar, Latifabad No. 11, Hyderabad.	Mechanical
6	Govt. Monotechnic Institute, Tandojam, Hyderabad.	Sugar Tech
7	Govt. Commercial Training Institute (GCTI), Sukkur.	Commerce
8	Govt. Commercial Training Institute (GCTI),Malir, Karachi.	Commerce
9	Govt. College of Education in Commercial Practices, (GCEP), Badin	Commerce
10	Govt. College of Education in Commercial Practices, (GCEP), Gharo, District Thatta.	Commerce

REFERENCES

European Commission. 2005. "Institutional Assessment and Capacity Development: Why, What and How? Aid Delivery Methods Concept Paper: A Contribution to Development Thinking.

Government of Pakistan. 2006. "National Vocational and Technical Education Commission Ordinance 2006." http://www.navtec.gov.pk/

Government of Sindh. 2007. "Sindh Technical Education and Vocational Training Authority Ordinance 2007."

Hopkins Thomas J. 1994. Handbook on Capacity Assessment Methodologies: An Analytical Review. UNDP. http://mirror.undp.org/magnet/cdrb/CAPMET~1.htm

International Standards Organization. 1999. "Quality Management – Guidelines of Training." First Edition, Reference number ISO 10015:1999(E)

Meyer, Franz Josef. 2009. "Findings and Recommendations: Impressions after Visits to Polytechnic, Monotechnic and Vocational Institutes." A memo (available with STEVTA).

Kardar, Shahid. "Technical & Vocational Training in Pakistan." The Lahore Journal of Economics, Vol.2, No.2

Morgan, Peter and Taschereau, Suzanne 1996. "Capacity and Institutional Assessment: Frameworks, Methods and Tools for Analysis." June. Quebec: CIDA Policy Branch.

http://www.acdi-cida.gc.ca/inet/images.nsf/vluimages/capacitydevelopment/\$file/1996-06-02tools(wkshp6).pdf

NAVTEC. 2008. "Skilling Pakistan: A Vision for the National Skills Strategy 2008-2012." Islamabad: Prime Minister's Secretariat. http://www.navtec.gov.pk/

NPO. 2005. "Status of Existing Technical Training Facilities in Pakistan-A Case Study of Public Sector Institutions." Islamabad: National Productivity Organization of the Ministry of Industries, Production & Special Initiatives Government of Pakistan.

Peano, Serge et. al. 2008. "Investment in Technical Vocational Education and Training (TVET) in the Phillippines." Published by International Institute for Educational Planning. http://iiep/web/doc/2008/05 or http://www.unesco.org/iiep

Pinto, Rogerio and Mrope, Angelous J., 1995. "Assessing Sector Institutions – Lessons of Experience from Zambia's Education Sector." World Bank Discussion Paper 297.

Sadiq, Kamran. 2008. Costing and Financing of TVET in Pakistan. Working Paper No. 1, for supporting the program design process for the National Skills Strategy of Pakistan Nov 2008. Islamabad: SEBCON (pvt) Ltd.

Shah, Iftikhar 2004."Problems and Prospects of Technical Education in Pakistan", University of Arid Agriculture, Rawalpindi, Pakistan.

STEVTA 2009. "Prospectus Session 2009-10: Diploma of Associate Engineer and Diploma in Commerce." http://www.stevta.gos.pk/

STEVTA. 2008. "Baseline Survey Report on Government Polytechnic Institute (GPI) Lyari." http://www.stevta.gos.pk/downloads/gpikhr.doc

VanSant Jerry. 2009. "Frameworks for Assessing the Institutional Capacity of PVOs and NGOs." Duke University. http://www.ngomanager.org/vansantarticle.htm

World Bank, 1995. "Projectizing the Governance Approach to Civil Service Reform: An Institutional Environment Assessment for Preparing a Sectoral Adjustment Loan in the Gambia." World Bank Discussion Papers, Africa Technical Department Series 1994.